Application no.: 10/729,069 Docket no.: SLK-2016-UT

AMENDMENT

In the claims

Please cancel claims 16-20 without prejudice or disclaimer. A complete listing of the claims is set forth hereafter.

1. (original) A method for detecting the presence or absence of cell fusion, which comprises:

contacting a system comprising a first cell with a second cell, wherein:

the first cell comprises a first reporter molecule fragment and a viral envelope protein;

the second cell comprises a second reporter molecule fragment and a viral envelope protein receptor capable of binding to the viral envelope protein of the first cell; and

the first reporter molecule fragment and the second reporter molecule fragment combine to form a functional reporter molecule upon fusion of the first cell with the second cell; and

detecting the presence or absence of a signal produced by the functional reporter molecule, whereby the presence of cell fusion is detected by the presence of a signal and the absence of cell fusion is detected by the absence of a signal.

2. (original) The method of claim 1, wherein the first reporter molecule fragment is an α-fragment of β-galactosidase and the second reporter molecule fragment is an Ω-fragment of β-galactosidase.

3. (original) The method of claim 1, wherein the first reporter molecule fragment is an Ω-fragment of β-galactosidase and the second reporter molecule fragment is an α-fragment of β-galactosidase.

4. (original) The method of claim 1, wherein the second cell further comprises a viral envelope co-receptor protein.

5. (original) The method of claim 4, wherein the viral envelope protein is HIV gp160, the viral envelope protein receptor is CD4, and the viral envelope protein co-receptor is CCR5.

6. (original) The method of claim 5, wherein the first cell further comprises HIV rev.

7. (original) The method of claim 4, wherein the viral envelope protein is HIV gp160, the viral envelope protein receptor is CD4, and the viral envelope protein co-receptor is CXCR4.

8. (original) The method of claim 7, wherein the first cell further comprises HIV rev.

9. (original) The method of claim 1, wherein the viral envelope protein is selected from the group consisting of HIV gp160, Ebola GP, HTLV SU, and influenza HA.

10. (original) The method of claim 1, wherein the signal is chemiluminescent.

11. (original) The method of claim 1, wherein the viral envelope protein is exogenously expressed.

12. (original) The method of claim 1, wherein the viral envelope protein receptor is exogenously expressed.

13. (original) The method of claim 1, wherein the viral envelope protein is endogenously expressed.

14. (original) The method of claim 1, wherein the viral envelope protein receptor is endogenously expressed.

15. (original) The method of claim 1, which further comprises contacting the system with a test molecule, whereby the test molecule is identified as a cell fusion inhibitor molecule when the signal produced by the functional reporter molecule in the system contacted by the test molecule is different than the signal produced in a system not contacted by the test molecule.

16-20. (Cancelled)